IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In the Application of:

VLADIMIR GRUSHIN ET AL.

CASE NO.: PE0649 US DIV6

APPLICATION NO.: UNKNOWN

CONFIRMATION NO.: UNKNOWN

GROUP ART UNIT:

UNKNOWN

EXAMINER: UNKNOWN

FILED: CONCURRENTLY HEREWITH

FOR:

ELECTROLUMINESCENT IRIDIUM COMPOUNDS WITH FLUORINATED

PHENYLPYRIDINES, PHENYLPYRIMIDINES, AND PHENYLQUINOLINES AND

DEVICES MADE WITH SUCH COMPOUNDS

INFORMATION DISCLOSURE STATEMENT

Assistant Commissioner for Patents Washington, D.C. 20231

Sir:

In compliance with 37 CFR 1.97 and 1.98, Applicants bring to the attention of the U.S. Patent and Trademark Office information that may be helpful in the examination of the above-identified patent application. All of the information is listed on attached Forms PTO/SB/08A, PTO/SB/08B, and PTO-892.

Benefit of the earlier filing dates of U.S. Patent Application No. 10/027,421 filed December 20, 2001 and U.S. Patent Application No. 09/879,014 filed June, 12, 2001 are claimed under 35 U.S.C. 120 for the above-referenced application and information cited in the priority applications is not supplied with this Information Disclosure Statement.

Should any fee be required in connection with the filing of this Information Disclosure Statement, please charge such fee to Deposit Account No. 04-1928 (E. I. du Pont de Nemours and Company).

Respectfully submitted

Attorney for Applicants Registration No. 32,659

Telephone: (302) 992-3749 Facsimile: (302) 892-7949

Dated: October 29, 2003

Enclosures

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INFORMATION DISCLOSURE STATEMENT BY APPLICANT

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Sheet	1	of	2
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	Complete if Known
Application Number	10/027,421
Filing Date	DECEMBER 20, 2001
First Named Inventor	VLADIMIR GRUSHIN ET AL.
Group Art Unit	2815
Examiner Name	UNKNOWN
Attorney Docket Number	PE0649 US CIP

U.S. PATENT DOCUMENTS								
Examiner Initials *	Cite No.1		ocument Number - Kind Code ² (if known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear		
		US-	2001/0019782 A1	09/06/2001	IGARASHI ET AL.			
		US -	2001/0053462 A1	12/20/2001	MISHIMA			
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	FOREIGN PATENT DOCUMENTS								
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		EP	1175128	A2	01/23/2002	FUJI PHOTO FILM CO.			
		wo	96/03410	A1	02/08/1996	BOEHRINGER MANNHEIM GMBH			
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Substitute for form 1449A/PTO Complete if Known Application Number 10/027,421 INFORMATION DISCLOSURE Filing Date **DECEMBER 20, 2001** STATEMENT BY APPLICANT First Named Inventor VLADIMIR GRUSHIN ET AL. Group Art Unit (use as many sheets as necessary) **UNKNOWN Examiner Name** Sheet of 2 Attorney Docket Number 10/027,421

		OTHER PRIOR ART NON PATENT	LITERATUR	E DOCUMENTS	
Examiner Initials *	Cite No.1	Include name of the author (in CAPITAL LETT the item (book, magazine, journal, serial, sympnumber(s), publisher, city a	osium, catalog	, etc.), date, page(s), volume-issue	T²
		DJUROVICH, PETER I. ET AL., Ir(III) Cyclometalat Polymer Blend and Organic LEDs, F			
		CHATANI, NAOTO ET AL., Ru3(CO)12-Catalyzed F Olefins. Carbonylation at a C-H Bond in the Benzer Chemi	Reaction of Pyridy ne Ring, J. Org. C cal Society	ylbenzenes with Carbon Monoxide and Chem., 1997, 2604-2610, 62, American	
		GOSMINI, CORINNE ET AL., Electrosynthesis of fu pyridine halides catalyzed by nickel bromide 2,2'-bipyr Elsevier			
		CACCHI, SANDRO ET AL., The Palladium-Catalyzed Transfer Hydrogenation/Heterocyclization of B-{2- Aminophenyl-a,B-ynones. An Approach to 2-Aryl- and 2-Vinylquinolines, Synlett, 1999, 401-404, No. 4, Thieme Stuttgart, New York			
		BALDO, M. A. ET AL., Very high-efficiency green organic light-emitting devices based on electrophosphorescence, Applied Physics Letters, July 5, 1999, 4-6, 75(1) American Institue of Physics			
		BALDO, M. A. ET AL., High-efficiency fluorescent organic light-emitting devices using a phosphorescent sensitizer, Nature, February 17, 2000, 750-753, 403, Macmillan Magazines Ltd.			
		WANG, YUE ET AL., (Hydroxyphenyl)pyridine electroluminescence material, Chemical Abstract			
		DEDEIAN K. ET AL., A New Synthetic Route to the Pr Tris-Ortho-Metalated Complexes of Iridium(III) with S 1687, 30(8), Ameri	ubstituted 2-Pher	nylpyridines, Inorg. Chem., 1991, 1685-	
Examiner			ate		
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Sheet 2

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		5,552,678		TANG ET AL.	09/03/96	
		2001/0019782	A1	IGARASHI ET AL.	09/06/01	
		60/347,910		LECLOUX ET AL.	11/07/01	
		60/347,911		LECLOUX ET AL.	11/07/01	
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Examiner Cite		For	eign Patent Docu	ment	Name of Patentee	Date of Publication of	Pages, Columns, Lines,	
Initials*	No.1	Office ³ Number ⁴ Kind Code ⁵ or Applicant of Cited Document	Cited Document MM-DD-YYYY	Where Relevant Passages or Relevant Figures Appear	T ₆			
		wo	00/70655	A2	Princeton Univ. and USC	11/23/00		
		wo	96/03410	A1	Boehringer Mannheim	02/08/96		
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Sheet 2 of 2

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		BALDO, M.A. et al., HIgh-efficiency fluorescent organic light-emitting devices using a phosphorescent sensitizer, Nature, February 17, 2000, 750-753, Vol. 403	
		DJUROVICH, PETER I. et al., Ir(III) Cyclometalated Complexes as Efficient Phosphorescent Emitters in Polymer Blend and Organic LEDs, Polymer Reprints, 2000, 770-771, 41(1)	
		BALDO, M.A. et al., Very high-efficiency green organic light-emitting devices based on electrophorescence, Applied Physics Letters, July 5, 1999, 4-6, 75(1), American Institute of Physics	
		LOHSE, OLIVIER, et al., The Palladium Catalysed Suzuki Coupling of 2- and 4-Chloropyridines, Synlett, 1999, 45- 48, No. 1, Thieme Suttgart, New York	
		BALDO, M.A. et al., Highly efficient phosphorescent emission from organic electroluminescent devices, Nature, September 10, 1998, 151-154, Vol 395	
		DEDEIAN, K. et al, A New Synthetic Route to the Preparation of a Series of Strong Photoreducing Agents: fac Tris-Ortho-Metalated Complexes of Iridium (III) with Substituted 2-Phenylpyridines, , Inorganic Chemistry, 1991, 1685-1687, 30(8)	

Examiner		Date	
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Notice of References Cited

Application/Control No. Applicant(s)/Patent Under Reexamination GRUSHIN ET AL. 09/879,014 Examiner Art Unit Page 1 of 1 Erik Kielin 2813

U.S. PATENT DOCUMENTS

*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Name	Classification
	Α	US-3,718,488	02-1973	Trofimenko et al.	106/1.28
	В	US-2002/0064681 A1	09-2001	Takiguchi et al.	428/690
	С	US-			
-	D	US-			
	E	US-			
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FOREIGN PATENT DOCUMENTS

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NON-PATENT DOCUMENTS

*		Individe an applicable Author Till Date Bull to
x	U	Include as applicable: Author, Title Date, Publisher, Edition or Volume, Pertinent Pages) Thompson et al. "Ir(III) cyclometalated complexes as efficient phosphorescent emitters in polymer blend organic LEDs" Polymer Preprints 41(1), 2000, pp. 770-771.
x	٧	Dedeian et al. "A new synthetic route to the preparation of a series of strong photoreducing agents: fac tris-othro-metalated complexes of iridium(III) with substituted 2-phenylpyridines" Inorganic Chemistry, Vol. 30, 1991, 1685-1687.
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